

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Jeff EDER

Serial No.: 09/764,068

Filed: January 19, 2001

For: A method of and system for defining and measuring the real options of a commercial enterprise

Group Art Unit: 3692

Examiner: C. Graham

**Supplemental Brief on Appeal**

Commissioner of Patents and Trademarks  
Washington, D.C. 20321

Sir or Madam:

The Table of Contents is on page 2 of this paper. A supplemental brief is required to correct a clerical error.

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## **1. Real party in interest**

Asset Reliance, Inc. (dba Asset Trust, Inc.)

## **2. Related appeals**

An Appeal for U.S. Patent Application 09/940,450 filed on August 29, 2001 may be affected by or have a bearing on this appeal. An Appeal for U.S. Patent Application 10/645,099 filed on August 21, 2003 may be affected by or have a bearing on this appeal.

## **3. Status of Claims**

Claims 36 - 65 and 67 – 74 are rejected and are the subject of this appeal. Claims 36, 40, 46, 55, 70 and 72 are amended. Claims 1 – 35 and 66 are cancelled.

## **4. Status of Amendments**

An amendment/reply that contained the amendments of claims 36, 40, 46, 55, 70 and 72 was filed on November 23, 2007.

## **5. Summary of Claimed Subject Matter**

One embodiment of a detailed method of and system for defining and measuring the real options of a commercial enterprise according to the present invention is best depicted in Figures 1 – 7 of the specification for the instant application. Figure 1 gives an overview of the major processing steps which include converting, integrating and storing data from a plurality of database management systems for use in analysis, analyzing the data as required to develop a model of enterprise market value by element of value and category of value, analyze changes and produce reports.

**Independent claim 36** - One embodiment of the system for defining and measuring the real options of a commercial enterprise is exemplified in independent claim 36 where a process prepares enterprise transaction data from a plurality of management systems for use in processing and analyzes the data using a series of multivariate analyses in order to develop a model of enterprise market value by element and category of value. More specifically, enterprise related transaction data are prepared for use in processing by integrating, converting and storing the data in accordance with a common schema as described in FIG. 1, reference number 200, FIG. 5A reference numbers 201 - 204, 207 – 209 and 211 FIG. 5B reference numbers 221 – 222, 225 – 226, 209 and 211, FIG. 5C reference numbers 241 – 242, 245 – 246, 209 and 211, FIG. 5D reference numbers 261 – 262, 265, 267, 269, 209 and 211, FIG. 5E reference numbers 268 – 269, 272, 278 - 279 and 281 - 282, FIG. 5F reference numbers 291 - 298, and line 1, page 14 through line 18, page 47 of the specification. The integrated data are then analyzed using a series of multivariate analyses in order to identify the data that is relevant to enterprise value, validate the schema and then use the relevant data to create a model of enterprise market value that identifies a tangible impact of each element of value on each

category of value in accordance with the procedure detailed in FIG. 1, reference number 300, FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 20, page 47 through line 30, page 75 of the specification.

Dependent claims

The limitations and activities associated with dependent claim 37 are described in several places including FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 20, page 47 through line 30, page 75 of the specification. The value of each element of value is then reported in accordance with the procedure detailed in FIG. 1 reference number 400, FIG. 7 reference numbers 402 – 407 and line 33, page 75 through line 30, page 77 of the specification and cross-referenced patent 5,615,109.

The limitations associated with dependent claim 38 are described in several places including line 7, page 54, line 5, page 56 and lines 21 through 33 of page 58 of the specification and FIG. 5B, block 615 and column 68, line 1 through line 5 of cross referenced U.S. Patent 5,615,109.

The limitations associated with dependent claim 39 are described in several places including FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 20, page 47 through line 30, page 75 of the specification. The value of each element of value is then reported in accordance with the procedure detailed in FIG. 1 reference number 400, FIG. 7 reference numbers 402 – 407 and line 33, page 75 through line 30, page 77 of the specification and cross-referenced patent 5,615,109.

The limitations associated with dependent claim 40 are described in several places including FIG. 6A reference number 306 and line 1 through line 4 on page 52 of the specification.

The limitations associated with dependent claim 41 are described in several places including FIG. 1 reference number 5, 10, 12, 15, 25, 30, 35 and 37, line 10 through line 15 on page 14 and line 5 through line 15, page 27 of the specification.

The limitations associated with dependent claim 42 are described in several places including FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 20, page 47 through line 30, page 75 of the specification.

The limitations associated with dependent claim 43 are described in several places including FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 20, page 47 through line 30, page 75 of the specification.

The limitations associated with dependent claim 44 are described in several places including Table 15 on page 29 of the specification.

The limitations associated with dependent claim 45 are described in several places including line 7, page 54, line 5, page 56 and lines 21 through 33 of page 58 of the specification and FIG. 5B, block 615 and column 68, line 1 through line 5 of cross referenced U.S. Patent 5,615,109.

**Independent claim 46** - A second embodiment of the system for defining and measuring the real options of a commercial enterprise is exemplified in independent claim 46 where an article of manufacture integrates enterprise transaction data from a plurality of management systems and then analyzes the data using a series of multivariate analyses in order to determine the value of each element of value. More specifically, enterprise related transaction data are prepared for use in processing by integrating, converting and storing the data in accordance with a common schema as described in FIG. 1, reference number 200, FIG. 5A reference numbers 201 - 204, 207 – 209 and 211 FIG. 5B reference numbers 221 – 222, 225 – 226, 209 and 211, FIG. 5C reference numbers 241 – 242, 245 – 246, 209 and 211, FIG. 5D reference numbers 261 – 262, 265, 267, 269, 209 and 211, FIG. 5E reference numbers 268 – 269, 272, 278 - 279 and 281 - 282, FIG. 5F reference numbers 291 - 298, and line 1, page 14 through line 18, page 47 of the specification. The integrated data are then analyzed in order to identify indicators of value, validate the schema, develop a model of enterprise market value that identifies a tangible impact of each element of value on each category of value using said indicators and then determine the value of each element of value in accordance with the procedure detailed in FIG. 1, reference number 300, FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 20, page 47 through line 30, page 75 of the specification. The value of each element of value is then reported in accordance with the procedure detailed in FIG. 1 reference number 400, FIG. 7 reference numbers 402 – 407 and line 33, page 75 through line 30, page 77 of the specification.

#### **Dependent claims**

The limitations associated with dependent claim 47 are described in several places including Table 1, page 9 and line 5 through line 15, page 27 of the specification.

The limitations associated with dependent claim 48 are described in several places including FIG 6C reference number 347 and line 22, page 70 through line 20, page 71 of the specification.

The limitations associated with dependent claim 49 are described in several places including FIG 6B reference number 331 and line 25, page 63 through line 20, page 65 of the specification.

The limitations associated with dependent claim 50 are well known to those of average skill in the art.

The limitations associated with dependent claim 51 are described in several places including Table 15 on page 29 of the specification.

The limitations and activities associated with dependent claim 52 are described in several places including FIG. 6B reference numbers 326 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 10, page 56 through line 30, page 75 of the specification.

The limitations associated with dependent claim 53 are described in several places including line 8, page 30 through line 15, page 30 of the specification.

The limitations associated with dependent claim 54 are described in several places including FIG 6A reference number 309 and line 15, page 54 through line 20, page 55 of the specification.

**Independent claim 55** - A third embodiment of the system for defining and measuring the real options of a commercial enterprise is exemplified in independent claim 55 where a process integrates enterprise related data in accordance with a common schema and analyzes the data in order to identify the data that are relevant to market value before using that data to develop a causal model of enterprise market value by element and category of value that identifies the set of changes to the elements of value that will optimize the future market value of the enterprise. More specifically, data from the database management systems associated with a plurality of enterprise transaction systems are prepared for use in processing by integrating, converting and storing the data in accordance with a common schema as described in FIG. 1, reference number 200, FIG. 5A reference numbers 201 - 204, 207 – 209 and 211 FIG. 5B reference numbers 221 – 222, 225 – 226, 209 and 211, FIG. 5C reference numbers 241 – 242, 245 – 246, 209 and 211, FIG. 5D reference numbers 261 – 262, 265, 267, 269, 209 and 211, FIG. 5E reference numbers 268 – 269, 272, 278 - 279 and 281 - 282, FIG. 5F reference numbers 291 - 298, and line 1, page 14 through line 18, page 47 of the specification. The integrated data are then analyzed using a series of analyses in order to identify the relevant data and then use that data to validate the schema and develop a causal model of enterprise market value that identifies a tangible impact of each element of value on each category of value in accordance with the procedure detailed in FIG. 1, reference number 300, FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 20, page 47 through line 30, page 75 of the specification. The market value model is then optimized using the method described in FIG. 5B reference number 615 and column 68, lines 1 - 12 of cross-referenced U.S. Patent 5,615,109.

#### **Dependent claims**

The limitations associated with dependent claim 56 are described in several places including Table 15 on page 29 of the specification.

The limitations associated with dependent claim 57 are described in several places including FIG. 1, reference number 200 and 300, FIG. 5A reference numbers 201 - 204, 207 – 209 and

211 FIG. 5B reference numbers 221 – 222, 225 – 226, 209 and 211, FIG. 5C reference numbers 241 – 242, 245 – 246, 209 and 211, FIG. 5D reference numbers 261 – 262, 265, 267, 269, 209 and 211, FIG. 5E reference numbers 268 – 269, 272, 278 - 279 and 281 - 282, FIG. 5F reference numbers 291 - 298, FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 1, page 14 through line 30, page 75 of the specification.

The limitations associated with dependent claim 58 are described in several places including FIG. 6C reference number 347 and line 22, page 70 through line 20, page 71 of the specification.

The limitations associated with dependent claim 59 are described in several places including FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 20, page 47 through line 30, page 75 of the specification.

The limitations associated with dependent claim 60 are described in several places including FIG. 6C reference number 347 and line 22, page 70 through line 20, page 71 of the specification.

The limitations associated with dependent claim 61 are described in several places including table 1, page 9 of the specification.

The limitations associated with dependent claim 62 are described in several places including FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 20, page 47 through line 30, page 75 of the specification.

The limitations associated with dependent claim 63 are described in several places including FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 20, page 47 through line 30, page 75 of the specification. The value of each element of value is then reported in accordance with the procedure detailed in FIG. 1 reference number 400, FIG. 7 reference numbers 402 – 407 and line 33, page 75 through line 30, page 77 of the specification and cross-referenced patent 5,615,109.

**Independent claim 64** - A fourth embodiment of the system for defining and measuring the real options of a commercial enterprise is exemplified in independent claim 64 where a process uses independent components of application software to produce useful results by analyzing data that has been integrated from a plurality of management systems in accordance with a common model or schema defined by an xml metadata. More specifically, data from the database management systems associated with a plurality of enterprise transaction systems are prepared for use in processing by integrating, converting and storing the data in accordance with a

common model or schema defined by xml metadata as described in FIG. 1, reference number 200, FIG. 5A reference numbers 201 - 204, 207 – 209 and 211 FIG. 5B reference numbers 221 – 222, 225 – 226, 209 and 211, FIG. 5C reference numbers 241 – 242, 245 – 246, 209 and 211, FIG. 5D reference numbers 261 – 262, 265, 267, 269, 209 and 211, FIG. 5E reference numbers 268 – 269, 272, 278 - 279 and 281 - 282, FIG. 5F reference numbers 291 - 298, and line 1, page 14 through line 18, page 47 of the specification. The integrated data are then processed with one or more independent software components (aka intelligent agents or bots) after schema validation in order to produce useful results as detailed in FIG. 1, reference number 300, FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 20, page 47 through line 30, page 75 of the specification.

#### Dependent claims

The limitations associated with dependent claim 65 are described in several places including FIG. 6A reference numbers 308 - 311 and line 30, page 53 through line 20, page 56 of the specification.

The limitations associated with dependent claim 67 are described in several places including FIG. 5A reference numbers 201 - 204, 207 – 209 and 211 FIG. 5B reference numbers 221 – 222, 225 – 226, 209 and 211, FIG. 5C reference numbers 241 – 242, 245 – 246, 209 and 211, FIG. 5D reference numbers 261 – 262, 265, 267, 269, 209 and 211, FIG. 5E reference numbers 268 – 269, 272, 278 - 279 and 281 - 282, FIG. 5F reference numbers 291 - 298, FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 1, page 14 through line 30, page 75 of the specification.

The limitations associated with dependent claim 68 are described in several places including FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 20, page 47 through line 30, page 75 of the specification.

The limitations associated with dependent claim 69 are described in several places including FIG. 1 reference number 5, 10, 12, 15, 25, 30, 35 and 37, line 10 through line 15 on page 14 and line 5 through line 15, page 27 of the specification.

**Independent claim 70** - A fifth embodiment of the system for defining and measuring the real options of a commercial enterprise is exemplified in independent claim 70 where a process integrates converts and stores data from a plurality of management systems for use in analysis in accordance with a common xml schema. More specifically, data from the database management systems associated with a plurality of enterprise transaction systems are prepared for use in processing by integrating, converting and storing the data in accordance with a common xml schema as described in FIG. 1, reference number 200, FIG. 5A reference

numbers 201 - 204, 207 – 209 and 211 FIG. 5B reference numbers 221 – 222, 225 – 226, 209 and 211, FIG. 5C reference numbers 241 – 242, 245 – 246, 209 and 211, FIG. 5D reference numbers 261 – 262, 265, 267, 269, 209 and 211, FIG. 5E reference numbers 268 – 269, 272, 278 - 279 and 281 - 282, FIG. 5F reference numbers 291 - 298, and line 1, page 14 through line 18, page 47 of the specification.

Dependent claims

The limitations associated with dependent claim 71 are described in several places including FIG. 5A reference numbers 202 and 203, line 8, page 30 through line 33, page 30 of the specification.

**Independent claim 72** - A sixth embodiment of the system for defining and measuring the real options of a commercial enterprise is exemplified in independent claim 72 where a process prepares data from a plurality of management systems for use in processing, analyzes the data in order identify the portion of the data relevant to market value before analyzing the relevant data in order to a contribution of each element of value to each category of value. The identified contributions are then reported in a balance sheet format. More specifically, enterprise related transaction data are prepared for use in processing by integrating, converting and storing the data in accordance with a common schema as described in FIG. 1, reference number 200, FIG. 5A reference numbers 201 - 204, 207 – 209 and 211 FIG. 5B reference numbers 221 – 222, 225 – 226, 209 and 211, FIG. 5C reference numbers 241 – 242, 245 – 246, 209 and 211, FIG. 5D reference numbers 261 – 262, 265, 267, 269, 209 and 211, FIG. 5E reference numbers 268 – 269, 272, 278 - 279 and 281 - 282, FIG. 5F reference numbers 291 - 298, and line 1, page 14 through line 18, page 47 of the specification. The integrated data are then analyzed in order to identify the data relevant to value, validate the schema and develop a model of enterprise market value that identifies a contribution of each element of value to each category of value in accordance with the procedure detailed in FIG. 1, reference number 300, FIG. 6A reference number 302 - 312, FIG. 6B reference numbers 321, 323 and 325 - 332, FIG. 6C reference numbers 341 - 343, 345, 347 and 351 - 353 and line 20, page 47 through line 30, page 75 of the specification. The value of each element of value is then reported in accordance with the procedure detailed in FIG. 1 reference number 400, FIG. 7 reference numbers 402 – 407 and line 33, page 75 through line 30, page 77 of the specification.

Dependent claims

The limitations associated with dependent claim 73 are described in several places including table 1, page 9, FIG. 7 reference numbers 402 – 407 and line 33, page 75 through line 30, page 77 of the specification.

The limitations associated with dependent claim 74 are described in several places including FIG. 5A reference numbers 202 and 203, FIG. 7 reference numbers 402 – 407, line 8, page 30 through line 33, page 30 and line 33, page 75 through line 30, page 77 of the specification.

## **6. Grounds of rejection to be reviewed on appeal**

**Issue 1** - Whether claim 36, claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44, claim 45, claim 46, claim 47, claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62 and/or claim 63 are patentable under 35 USC 103(a) over Marshall (US Patent 6,073,115) in view of Krishnaswamy (U.S. Patent 6,909,708)?

**Issue 2** - Whether claim 64, claim 65, claim 67, claim 68 and/or claim 69 are patentable under 35 USC 103(a) over Marshall in view of Krishnaswamy?

**Issue 3** - Whether claim 70 and/or claim 71 are patentable under 35 USC 103(a) over Marshall in view of Krishnaswamy?

**Issue 4** - Whether claim 72, claim 73 and/or claim 74 are patentable under 35 USC 103(a) over Marshall in view of Krishnaswamy?

**Issue 5** – Whether the invention described in claim 36 and/or claim 55 represents patentable subject matter under 35 USC 101?

**Issue 6** – Whether the invention described in claim 64 and/or claim 70 represents patentable subject matter under 35 USC 101?

**Issue 7** – Whether claim 36, claim 55, claim 64 and/or claim 70 are indefinite under 35 USC 112 second paragraph?

**Issue 8** – Whether claim 46 is indefinite under 35 USC 112 second paragraph?

## 7. The Argument

For each ground of rejection which Appellant contests herein which applies to more than one claim, such additional claims, to the extent separately identified and argued below, do not stand and fall together.

**Issue 1 - Whether claim 36, claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44, claim 45, claim 46, claim 47, claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62 and/or claim 63 are patentable under 35 USC 103(a) over Marshall (US Patent 6,073,115) in view of Krishnaswamy (U.S. Patent 6,909,708)?**

The claims are patentable for several reasons. The primary reason is that the cited combination of documents (Marshall and Krishnaswamy) and the arguments related to the cited combination of documents fail to establish a *prima facie* case of obviousness for a number of reasons for every rejected claim as detailed below.

Reason # 1 - The first reason that claim 36, claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44, claim 45, claim 46, claim 47, claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62 and claim 63 are patentable is because the cited documents fail to establish a *prima facie* case of obviousness because they teach away from a number of claimed methods. MPEP § 2141.02 states that: "*in determining the difference between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious but whether the claimed invention as a whole would have been obvious (Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983)).*" Furthermore, it is well established that: *A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).* Examples of the cited documents teaching away from the claimed invention include:

- 1) The claimed inventions teach the use of the data to create financial models (see claims 36, 46 and 55). By way of contrast, Marshall teaches the exact opposite procedure as it teaches the use of financial models to create data (Marshall, C5, L3 to L6).
- 2) The claimed inventions teach the analysis and display of tangible information about real world objects such as alliances, brands, channels, customers, employees, intellectual property, partnerships, processes and/or vendors (see claims 36, 37, 46 and 55). By way of contrast, Marshall teaches the display of abstract information about objects that do not have a physical equivalent in the real world (Marshall C3, L53 to L54).
- 3) The claimed inventions teach the use of artificial intelligence methods to identify the important data and the important relationships (see claims 36 – 63). By way of contrast, Marshall teaches that the user is responsible for identifying the important data and the important relationships (Marshall C4, L41 to L49).

- 4) The claimed inventions teach the use of an integrated set of data to complete processing (see claims 46 and 55). By way of contrast, Krishnaswamy teaches the use of data that are simultaneously distributed to many locations to complete processing (Krishnaswamy, C39, L5).
- 5) The claimed inventions teach the use of a set of data that has been integrated from a plurality of applications in accordance with a common schema to complete processing (see claims 46 and 55). By way of contrast, Marshall and Krishnaswamy teach the use of Dynamic Data Exchange to exchange data directly between applications without any integration of the data before the exchange (Marshall, C13, L51).

Reason #2 – Marshall describes a virtual reality display system while Krishnasway describes a communication system architecture for videoconferencing. Unsurprisingly, the combination does not teach or suggest any of the claim limitations. More specifically, the second reason that the cited combination fails to establish a *prima facie* case of obviousness that would support the rejection of claim 36, claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44, claim 45, claim 46, claim 47, claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62 and claim 63 is that the cited combination does not teach or suggest one or more of the limitations for every rejected claim. *MPEP 2143.03 provides that: to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art (In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).* Limitations not taught or suggested by the cited combination include:

- 1) Claim 36 (also affects claims 37, 39, 41, 42, 43, 44 and 45 directly). Limitations not taught or suggested include:

*preparing transaction data related to a commercial enterprise for use in processing, analyzing said data to identify the portion of data relevant to market value, and developing a model of an enterprise market value by an element and category of value by completing a series of multivariate analyses that utilizes said identified data where the categories of value are selected from the group consisting of current operation, real option, market sentiment and combinations thereof, where the model of enterprise market value identifies a tangible contribution of each element of value to each category of value and calculates a share price for enterprise equity, and where the elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, intellectual property, partnerships, processes, vendors and vendor relationships and combinations thereof*

The cited combination does not teach or suggest: developing a model of an enterprise market value by an element and category of value by completing a series of multivariate analyses that utilizes said identified data, categories of value selected from the group consisting of current operation, real option, market sentiment and combinations thereof, a model of enterprise market value identifying a tangible contribution of each element of value to each category of value where the elements of value are selected from the group consisting of alliances, brands,

channels, customers, customer relationships, employees, intellectual property, partnerships, processes, vendors and vendor relationships and combinations thereof and/or calculating a share price for enterprise equity.

2) Claim 37 (also affects claim 38 directly). Limitations not taught or suggested include determining an element contribution, quantifying an element impact, valuing an element, completing an analysis of enterprise financial performance, optimizing one or more aspects of enterprise financial performance, simulating an enterprise financial performance, optimizing a future enterprise market value, quantifying a future enterprise market value, creating a management report, valuing an enterprise market sentiment, calculating a real option discount rate, valuing a real option, valuing a share of enterprise stock, determining a target share price and combinations thereof.

3) Claim 38. Limitations not taught or suggested include a financial performance optimization that comprises identifying one or more value driver changes that will optimize of one or more aspects of financial performance where said aspects of financial performance are selected from the group consisting of revenue, expense, capital change, cash flow, real option value, future market value, market sentiment value, market value and combinations thereof. Marshall does not teach or suggest value drivers. Marshall does discuss display drivers which have nothing to do with value drivers.

4) Claim 39 (also affects claim 40 directly). Limitations not taught or suggested include a series of multivariate analyses selected from the group consisting of identifying one or more previously unknown item performance indicators, discovering one or more previously unknown value drivers, identifying one or more previously unknown relationships between one or more value drivers, identifying one or more previously unknown relationships between one or more elements of value, quantifying one or more inter-relationships between value drivers, quantifying one or more impacts between elements of value, developing one or more composite variables, developing one or more vectors, developing one or more causal element impact summaries, identifying a best fit combination of a predictive model algorithm and one or more element of value impact summaries for modeling enterprise market value and each of the components of value, determining a net element impact for each category of value, determining a relative strength of the elements of value between two or more enterprises, developing one or more real option discount rates, calculating one or more real option values, calculating an enterprise market sentiment value by element and combinations thereof.

5) Claim 40. Limitations not taught or suggested include predictive model algorithms selected by a tournament from the group consisting of classification and regression tree; generalized autoregressive conditional heteroskedasticity, regression; generalized additive; redundant regression network; rough-set analysis; Bayesian; multivariate adaptive regression spline and support vector method.

6) Claim 41. Limitations not taught or suggested include systems selected from the group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, the Internet and combinations thereof.

7) Claim 42. Limitations not taught or suggested include using one or more composite applications to complete the processing. Composite applications are not taught or suggested by Marshall or Krishnaswamy, Marshall teaches away by teaching the use of DDE which links applications together eliminating their independence.

8) Claim 43. Limitations not taught or suggested include a model of enterprise market value further comprises a combination of component and category of value models selected from the group consisting of up to three predictive component of value models, a real option discount rate model, a real option valuation model, a market sentiment model by element of value and combinations thereof.

9) Claim 44. Limitations not taught or suggested include integrating data in accordance with a common schema where the common schema is defined by a CORBA metadata or an xml metadata. Metadata is not taught or suggested by Marshall or Krishnaswamy.

10) Claim 45. Limitations not taught or suggested include identifying one or more value driver changes that will optimize a future market value portion of enterprise market value. Value drivers are not taught or suggested by Marshall or Krishnaswamy.

11) Claim 46 (also affects claims 47, 48, 49, 50, 51, 52, 53 and 54 directly). Limitations not taught or suggested include:

*integrating enterprise transaction data in accordance with a common model or schema, analyzing said data using a predictive model to identify one or more indicators of value for each element of value by a category of value where the categories of value are current operation and categories of value selected from the group consisting of real option, market sentiment and combinations thereof,*

*determining a net tangible, relative contribution for each element of value to each category of value by analyzing an enterprise financial performance model comprised of with said indicators by category and element of value,*

*calculating a value for each element of value using said net relative contributions, and reporting the value of the elements of value using an electronic display or a paper document*

The cited combination does not teach or suggest: integrating enterprise transaction data in accordance with a common model or schema, analyzing said data using a predictive model to identify one or more indicators of value for each element of value by a category of value where the categories of value are current operation and categories of value selected from the group consisting of real option, market sentiment and combinations thereof, determining a net tangible, relative contribution for each element of value to each category of value by analyzing an enterprise financial performance model comprised of with said indicators by category and element of value, calculating a value for each element of value using said net relative

contributions, and/or reporting the value of the elements of value using an electronic display or a paper document.

12) Claim 47. Limitations not taught or suggested include where elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, intellectual property, partnerships, processes, production equipment, vendors and vendor relationships, and combinations thereof. Marshall teaches away by teaching a focus on things that do not exist in the real world.

13) Claim 48. Limitations not taught or suggested include a net relative contribution for each of one or more elements of value to each of one or more categories of value further comprises a direct element contribution to a category of value net of any element impacts on other elements of value.

14) Claim 49. Limitations not taught or suggested include computing the difference between the real option value calculated using the company cost of capital and the value calculated using a real option discount rate determined on the basis of relative element strength; and assigning the value difference to the different elements of value based on their relative contribution to the difference in the two discount rates. Real options are not taught or suggested by Marshall or Krishnaswamy

15) Claim 50. Limitations not taught or suggested include net element contributions that are identified by learning from the data where learning from the data is supported by genetic algorithms.

16) Claim 51. Limitations not taught or suggested include a common model or schema is defined by an xml metadata. XML is not taught or suggested by Marshall or Krishnaswamy.

17) Claim 52. Limitations not taught or suggested include: identifying one or more value drivers for each element of value from the previously identified indicators, developing one or more element impact summaries from said value drivers for market value and each component of value, identifying a best fit combination of element impact summaries and predictive model algorithm for modeling market value and each component of value, determining a relative strength for each of the elements of value causal to market value change vis a vis competitors, calculating a real option discount rate using the relative element strength information for the elements that support the real option, calculating a real option value and identifying a contribution to real option value by element of value using said real option discount rate, and/or identifying a net element contribution to enterprise market value by category of value by combining the results from the prior processing.

18) Claim 53. Limitations not taught or suggested include where the calculated value for each element of value further comprises a value for a point in time within a sequential series of points in time.

19) Claim 54. Limitations not taught or suggested include the net relative contribution for each element of value to each category of value further comprises a net causal contribution. Marshall does not mention or suggest “causal” analysis of any kind. Krishnaswamy has no relevant teachings.

20) Claim 55 (also affects claims 56, 57, 58, 59, 60, 61, 62, 63 and 64 directly). Limitations not taught or suggested include:

*integrating enterprise transaction data in accordance with a common model or schema, analyzing said data using a predictive model to identify one or more indicators of value for each element of value by a category of value where the categories of value are current operation and categories of value selected from the group consisting of real option, market sentiment and combinations thereof, determining a net tangible, relative contribution for each element of value to each category of value by analyzing an enterprise financial performance model comprised of with said indicators by category and element of value, calculating a value for each element of value using said net relative contributions, and reporting the value of the elements of value using an electronic display or a paper document*

The cited combination does not teach or suggest: integrating enterprise transaction data in accordance with a common model or schema, analyzing said data using a predictive model to identify one or more indicators of value for each element of value by a category of value where the categories of value are current operation and categories of value selected from the group consisting of real option, market sentiment and combinations thereof, determining a net tangible, relative contribution for each element of value to each category of value by analyzing an enterprise financial performance model comprised of with said indicators by category and element of value, calculating a value for each element of value using said net relative contributions, and/or reporting the value of the elements of value using an electronic display or a paper document.

21) Claim 56. Limitations not taught or suggested include where a common model or schema is defined by metadata. As noted previously, metadata is not taught or suggested by Marshall or Krishnaswamy.

22) Claim 57. Limitations not taught or suggested include a flexible system architecture where said architecture further comprises event data that has been integrated in accordance with a common xml schema and independent components of application software that can be combined to process said data as required to produce useful results.

23) Claim 58. Limitations not taught or suggested include a net contribution for each of one or more elements of value to each of one or more categories of value further comprises a direct element contribution to a category of value net of any element impacts on other elements of value within said category of value.

24) Claim 59. Limitations not taught or suggested include a causal model of net element contribution further comprises a plurality of models selected from the group consisting of

predictive component of value models, predictive market value models, relative element strength models, real option discount rate models, real option valuation models, market sentiment models and combinations thereof. As noted previously, Marshall does not mention or suggest “causal” analysis of any kind. Krishnaswamy has no relevant teachings

25) Claim 60. Limitations not taught or suggested include a net contribution for each of one or more elements of value further comprises a direct contribution to a value of a category of value net of any impact on other elements of value.

26) Claim 61. Limitations not taught or suggested include: one or more categories of value selected from the group consisting of current operation, real option, market sentiment and combinations thereof.

27) Claim 62. Limitations not taught or suggested include a future market value portion of enterprise market value that comprises a summation of values selected from the group consisting of the real option value, the portion of current operation value caused by elements of value, the portion of market sentiment value caused by elements of value and combinations thereof.

28) Claim 63. Limitations not taught or suggested include value driver changes that will optimize future market value are identified by algorithms selected from the group consisting of monte carlo algorithms, genetic algorithms, multi criteria optimization algorithms and combinations thereof. Marshall and Krishnaswamy do not teach or suggest optimization of any kind.

Reason # 3 - The third reason claim 36, claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44, claim 45, claim 46, claim 47, claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62 and claim 63 are patentable is that the proposed theoretical combination would destroy the ability of each of the disclosed inventions to function. It is well established that *when a modification of a reference destroys the intent, purpose or function of an invention such a proposed modification is not proper and the prima facie case of obviousness cannot be properly made (In re Gordon 733 F.2d 900, 221 U.S.PQ 1125 Fed Circuit 1984).*

Marshall teaches and relies on the use of Dynamic Data Exchange (hereinafter DDE) to obtain the data used for the virtual reality display system (Marshall, C13, L51). DDE requires the linked data to reside on a single computer (see page 39, Evidence Appendix). If the Marshall invention was modified to use data stored on different computers, then DDE would no longer function and the Marshall invention would not be able to perform the function it was designed to perform – the display of information in a virtual reality environment.

Krishnaswamy teaches the use of sets of data that are distributed and stored in many different computers simultaneously in order to provide the functionality it was designed to provide

(Krishnaswamy, C39, L5). If the Krishnaswamy invention was modified to process data from a single computer, then the Krishnaswamy invention would not be able to perform the function it was designed to perform - routing data through a switched network (Krishnaswamy, abstract).

Reason #4 – The fourth reason claim 36, claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44, claim 45, claim 46, claim 47, claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62 and claim 63 are patentable is because the Examiner has not been able to explain the rationale for modifying the cited combination teachings to replicate the functionality of the claimed invention. *The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Court quoting In re Kahn 41 stated that “[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness (KSR, 550 U.S. at I, 82 USPQ2d at 1396).”*

Summarizing the above, the Appellant respectfully submits that the Examiner has failed to produce the evidence required to establish a *prima facie* case of obviousness for a single claim. These failures provide additional evidence that the claimed inventions for producing concrete, tangible and useful results is new, novel and non-obvious. The Appellant respectfully submits that another reason claim 36, claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44, claim 45, claim 46, claim 47, claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62 and claim 63 are patentable is that the prior art review for the instant application is apparently being completed under a different standard than that used for the review of similar patent applications - an apparent violation of 35 USC 3.

**Issue 2 - Whether claim 64, claim 65, claim 67, claim 68 and/or claim 69 are patentable under 35 USC 103(a) over Marshall in view of Krishnaswamy?**

The claims are patentable for several reasons. The primary reason is that the cited combination of documents (Marshall and Krishnaswamy) and the arguments related to the cited combination of documents fail to establish a *prima facie* case of obviousness for a number of reasons for every rejected claim as detailed below.

Reason # 1 - The first reason that claim 64, claim 65, claim 67, claim 68 and claim 69 are patentable is that the cited documents fail to establish a *prima facie* case of obviousness because they teach away from a number of claimed methods. MPEP § 2141.02 states that: *“in determining the difference between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious but whether the claimed invention as a whole would have been obvious (Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983)).”* Furthermore, it is well established that: *A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead*

*away from the claimed invention.* *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Examples of the cited documents teaching away from the claimed invention include:

- 1) The claimed invention teaches the use of independent components of application software to complete processing (see claim 64). By way of contrast, Marshall and Krishnaswamy teach combining software applications together in a single container (with DDE or OLE) thereby eliminating application independence.
- 2) The claimed invention teaches the use of an integrated set of data to complete processing (see claim 64). By way of contrast, Krishnaswamy teaches the use of sets of data that are distributed and stored in many locations simultaneously to complete processing (Krishnaswamy, C39, L5).
- 3) The claimed invention teaches the use of a set of data that has been integrated in accordance with a common schema to complete processing (see claim 64). By way of contrast, Krishnaswamy and Marshall teach the use of Dynamic Data Exchange to obtain data from different applications without data integration (Marshall, C13, L51; Krishnaswamy C139, L34 – C140, L37).

Reason # 2 - The second reason claim 64, claim 65, claim 67, claim 68 and claim 69 are patentable is that the proposed theoretical combination would destroy the ability of each of the disclosed inventions to function. It is well established that *when a modification of a reference destroys the intent, purpose or function of an invention such a proposed modification is not proper and the prima facie case of obviousness cannot be properly made* (*In re Gordon* 733 F.2d 900, 221 U.S.PQ 1125 Fed Circuit 1984). Krishnaswamy teaches the use of sets of data that are distributed and stored in many different computers simultaneously in order to provide the functionality it was designed to provide (Krishnaswamy, C39, L5). Marshall teaches and relies on the use of Dynamic Data Exchange (hereinafter DDE) to provide data for the virtual reality display system (Marshall, C13, L51). DDE requires that the data reside on a single computer (see page 39, Evidence Appendix). If the Marshall invention was modified to use data stored on different computers, then DDE would no longer function and the Marshall invention would not be able to perform the function it was designed to perform – the display of information in a virtual reality environment. Conversely, if the Krishnaswamy invention was modified to store data on a single computer, then the Krishnaswamy invention would not be able to perform the function it was designed to perform - routing data through a switched network (Krishnaswamy, abstract).

Reason #3 – Marshall describes a virtual reality display system while Krishnaswamy describes a communication systems architecture for videoconferencing. Unsurprisingly, the combination does not teach or suggest any of the claim limitations. More specifically, the third reason that the cited combination fails to establish a *prima facie case of obviousness* that would support the

rejection of claim 64, claim 65, claim 67, claim 68 and claim 69 is that the cited combination does not teach or suggest one or more of the limitations for every rejected claim. *MPEP 2143.03 provides that: to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art (In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).* Limitations not taught or suggested by the cited combination include:

- 1) Claim 64 (also affects claims 65, 67, 68 and 69 directly). Limitations not taught or suggested include:

*using two or more independent components of application software to produce one or more useful results by processing data where said data has been aggregated from two or more systems in accordance with a common model or schema defined by an xml metadata standard*

The cited combination does not teach or suggest: independent components of application software, aggregating data from two or more systems in accordance with a common model or schema and/or using a model or schema defined by an xml metadata standard.

- 2) Claim 65. The cited combination teaches away from independent components and does not teach anything about their flexible combination.

3) Claim 67. Limitations not taught or suggested include attribute derivation, capitalization, causal analysis, classification, clustering, count linkages, data acquisition, data conversion, data storage, data transformation, element life estimation, indicator selection, induction, keyword counting, keyword match identification, linkage location, relative strength determination, statistical learning, valuation, vector generation and combinations thereof.

4) Claim 68. Limitations not taught or suggested include element contribution determination, element impact quantification, element valuation, enterprise financial performance analysis, enterprise financial performance optimization, enterprise financial performance simulation, future market value optimization, future market value quantification, management reporting, real option discount rate calculation, real option valuation, share price valuation, sub-element clustering, target share price determination and combinations thereof.

5) Claim 69. Limitations not taught or suggested include accounts receivable systems, accounts payable systems, advanced financial systems, basic financial systems, alliance management systems, brand management systems, customer relationship management systems, channel management systems, estimating systems, intellectual property management systems, process management systems, supply chain management systems, vendor management systems, operation management systems, sales management systems, human resource systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, web site management systems, external databases and combinations thereof.

Reason #4 – The fourth reason claim 64, claim 65, claim 67, claim 68 and claim 69 are patentable is the fourth reason advanced under issue #1.

Summarizing the above, the Appellant respectfully submits that the Examiner has failed to produce the evidence required to establish a *prima facie* case of obviousness for a single claim. These failures provide additional evidence that the claimed inventions for producing concrete, tangible and useful results is new, novel and non-obvious. The Appellant respectfully submits that another reason claim 64, claim 65, claim 67, claim 68 and claim 69 are patentable is that the prior art review for the instant application is apparently being completed under a different standard than that used for the review of similar patent applications - an apparent violation of 35 USC 3.

**Issue 3 - Whether claim 70 and/or claim 71 are patentable under 35 USC 103(a) over Marshall in view of Krishnaswamy?**

The claims are patentable for several reasons. The primary reason is that the cited combination of documents (Marshall and Krishnaswamy) and the arguments related to the cited combination of documents fail to establish a *prima facie* case of obviousness for a number of reasons for every rejected claim as detailed below.

Reason #1 – The first reason that the cited combination fails to establish a *prima facie* case of obviousness that would support the rejection of claim 70 and claim 71 is that the cited combination does not teach or suggest one or more of the limitations for every rejected claim. *MPEP 2143.03 provides that: to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art (In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).* Marshall describes a virtual reality display system while Krishnaswamy describes a communication systems architecture for videoconferencing. Unsurprisingly, the combination does not teach or suggest any of the claim limitations. More specifically, limitations not taught or suggested by the cited combination include:

- 1) Claim 70 (also affects claims 71 directly). Limitations not taught or suggested include:

*Integrating, converting and storing enterprise related transaction data in accordance with a common xml schema to support organization processing where a set of integration and conversion rules are established using a metadata and conversion rules window and saved in metadata mapping table, where the common schema further comprises a network schema that is defined by an xml metadata, where said integration is completed by one or more independent software components*

The cited combination does not teach or suggest: converting and storing data, a common schema, a common xml schema, a network schema, a metadata and conversion rules window, a metadata mapping table, metadata of any kind and/or independent software components.

- 2) Claim 71. The cited combination does not teach anything about components of value, sub components of value, known value drivers and elements of value that exist in the real world.

As discussed previously, Marshall's exclusive focus is on abstract information about entities that do not exist in the real world.

Reason # 2 - The second reason that claim 70 and claim 71 are patentable is that the cited documents fail to establish a *prima facie* case of obviousness because they teach away from a number of claimed methods. MPEP § 2141.02 states that: "*in determining the difference between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious but whether the claimed invention as a whole would have been obvious (Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983)).*" Furthermore, it is well established that: *A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).* Examples of the cited documents teaching away from the claimed invention include:

- 1) The claimed invention teaches the use of a set of data that has been integrated and stored from a plurality of applications in accordance with a common schema to complete processing (see claim 64). By way of contrast, Krishnaswamy and Marshall teach the use of Dynamic Data Exchange protocols to directly exchange data between different applications without integration or storage (Marshall, C13, L51; C139, L34 – C140, L37).

Reason #3 - The third reason the claims are patentable is that the proposed combination would require a change in one or more of the principles of operation of the inventions disclosed in the cited documents. MPEP 2143.01 provides that when "*the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)*". Some of the changes in operating principle required to replicate the claimed functionality include:

- 1) Change in data management. The claimed invention teaches the use of a metadata standard to guide the integration and storage of data from a plurality of applications in accordance with a common schema. Replicating the claimed functionality would require both Marshall and Krishnaswamy to change the data management principle of operation from reliance on a separate management of each application and its data coupled with an ad-hoc, direct exchange of data between applications to a centralized management of data based on a single, central metadata standard.

Reason #4 – The fourth reason claim 70 and claim 71 are patentable is the fourth reason advanced under issue #1.

Summarizing the above, the Appellant respectfully submits that the Examiner has failed to produce the evidence required to establish a *prima facie* case of obviousness for a single claim. These failures provide additional evidence that the claimed inventions for producing concrete,

tangible and useful results is new, novel and non-obvious. The Appellant respectfully submits that another reason claim 70 and claim 71 are patentable is that the prior art review for the instant application is apparently being completed under a different standard than that used for the review of similar patent applications - an apparent violation of 35 USC 3.

**Issue 4 - Whether claim 72, claim 73 and/or claim 74 are patentable under 35 USC 103(a) over Marshall in view of Krishnaswamy?**

The claims are patentable for several reasons. The primary reason is that the cited combination of documents (Marshall and Krishnaswamy) and the arguments related to the cited combination of documents fail to establish a *prima facie* case of obviousness for a number of reasons for every rejected claim as detailed below.

Reason #1 – The first reason that the cited combination fails to establish a *prima facie* case of obviousness that would support the rejection of claim 72, claim 73 and claim 74 is that the cited combination does not teach or suggest one or more of the limitations for every rejected claim. *MPEP 2143.03 provides that: to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art (In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).* Marshall describes a virtual reality display system while Krishnaswamy describes a communication systems architecture for videoconferencing. Unsurprisingly, the combination does not teach or suggest any of the claim limitations. More specifically, limitations not taught or suggested by the cited combination include:

- 1) Claim 72 (also affects claims 73 and 74 directly). Limitations not taught or suggested include:

*analyzing the identified data with a series of models as required to identify a tangible contribution of each of one or more elements of value to each of one or more categories of value where the categories of value further comprise a current operation category of value and a category of value selected from the group consisting of real option, market sentiment and combinations thereof,*

*using the tangible contribution for each element of value to identify a market value for each element of value, and*

*reporting the value of each element of value in a balance sheet format for a point in time*

The cited combination does not teach or suggest: analyzing data with a series of models, elements of value, categories of value, market value, balance sheet reporting and/or identifying value for a point in time.

- 2) Claim 73. The cited combination does not teach anything about combining real world element valuations with real world financial asset values in a balance sheet format. Marshall teaches away by teaching a focus on things that do not exist in the real world.

- 3) Claim 74. The cited combination does not teach anything about combining the change in real world element valuations with the change in real world financial asset values in a balance sheet format. Marshall teaches away by teaching a focus on things that do not exist in the real world.

Reason #2 - The second reason that claim 72, claim 73 and claim 74 are patentable is that the cited documents fail to establish a prima facie case of obviousness because they teach away from a number of claimed methods. MPEP § 2141.02 states that: “*in determining the difference between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious but whether the claimed invention as a whole would have been obvious (Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983)).*” Furthermore, it is well established that: *A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).* Examples of the cited documents teaching away from the claimed invention include:

- 1) The claimed invention teaches the analysis and display of tangible information about real world objects such as alliances, brands, channels, customers, employees, intellectual property, partnerships, processes and/or vendors (see claim 72). By way of contrast, Marshall teaches the display of abstract information about objects that do not have a physical equivalent in the real world (Marshall C3, L53 to L54).
- 2) The claimed invention teaches that the invention identifies the important data and the important relationships (see claim 72). By way of contrast, Marshall teaches that the user is responsible for identifying the important data and the important relationships (Marshall C4, L41 to L49).

Reason #3 – The third reason claim 72, claim 73 and claim 74 are patentable is the fourth reason advanced under issue #1.

Summarizing the above, the Appellant respectfully submits that the Examiner has failed to produce the evidence required to establish a prima facie case of obviousness for a single claim. These failures provide additional evidence that the claimed inventions for producing concrete, tangible and useful results is new, novel and non-obvious. The Appellant respectfully submits that another reason claim 72, claim 73 and claim 74 are patentable is that the prior art review for the instant application is apparently being completed under a different standard than that used for the review of similar patent applications - an apparent violation of 35 USC 3.

**Issue 5 - Whether the invention described in claim 36 and/or claim 55 represents patentable subject matter under 35 USC 101?**

The claims are patentable for several reasons. The primary reason is that the arguments related to the patentability of the claimed invention, an alleged abstract focus that is not concrete, tangible and/or useful, fails to establish a prima facie case of non statutory subject matter and a lack of utility for a number of reasons as detailed below.

Reason #1 - The first reason claims 36 and 55 are patentable is that the Examiner has failed to establish a prima facie case that any of the claims are directed to non-statutory subject matter

and/or lack utility. As noted in the *Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility*, the burden is on the USPTO to set forth a *prima facie* case of unpatentability *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Along these same lines MPEP 2164.07 states “the examiner has the initial burden of challenging an asserted utility. Only after the examiner has provided evidence showing that one of ordinary skill in the art would reasonably doubt the asserted utility does the burden shift to the applicant to provide rebuttal evidence sufficient to convince one of ordinary skill in the art of the invention’s asserted utility. *In re Brana*, 51 F.3d 1560, 1566, 34 USPQ2d 1436, 1441 (Fed. Cir. 1995) (citing *In re Bundy*, 642 F.2d 430, 433, 209 USPQ 48, 51 (CCPA 1981)). In spite of this well known requirement, the Examiner has not presented any evidence that any of the claimed inventions are not concrete, are not tangible and/or are not useful. The complete absence of evidence leads to the inevitable conclusion that the Examiner has failed to establish a *prima facie* case that would support a §101 rejection for either claim.

Reason #2 - The second reason claims 36 and 55 are patentable is that the claim rejections are not in compliance with the requirements of the Administrative Procedures Act and are therefore moot. *In Dickinson v. Zurko*, 119 S. Ct. 1816, 50 USPQ2d 1930 (1999), the Supreme Court held that the appropriate standard of review of U.S.P.T.O. findings of fact are the standards set forth in the Administrative Procedure Act (“APA”) at 5 U.S.C. 706 (1994). The APA provides two standards for review – an arbitrary and capricious standard and a substantial evidence standard. The Appellant respectfully submits that as discussed under Reason #1, the Office Action used to support these claim rejections fail to provide even a scintilla of evidence to support the allegations of non statutory subject matter and lack of utility that it contains and that as a result it fails to meet the substantial evidence standard. The Appellant respectfully submits that the rejection of claim 36 also fails to pass the arbitrary and capricious test because there is no rational connection between the U.S.P.T.O. fact-findings in Lindeman (U.S. Patent 7,249,004) and the finding that claim 36 represents non-statutory subject matter. In Lindeman the U.S.P.T.O. found that creating an analysis model of a mill roll design was tangible, concrete and useful. Given these previous fact-findings, it is irrational and unreasonable to state that the claim 36 method of developing a model for analyzing the market value of a commercial enterprise is not tangible concrete and/or useful. The rejection of claim 55 also fails to pass the arbitrary and capricious test because there is no rational connection between the U.S.P.T.O. fact-findings in Friend (U.S. Patent 7,243,081) and the finding that claim 55 represents non-statutory subject matter. In Friend the U.S.P.T.O. found that identifying an asset allocation that optimizes cash flow was tangible concrete and useful. Given this previous fact-finding, it is also irrational and unreasonable to state that the claim 55 method of identifying element of value changes that will optimize a future market value for an enterprise is not tangible concrete and/or useful.

Reason #3 - The third reason claims 36 and claim 55 are patentable is that the claimed inventions are processes that transform transaction data into a different thing: a model of

enterprise market value and a list of changes to elements of value (developed using the model of enterprise market value) that will optimize a future market value. As noted in the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility "*the Supreme Court noted that one example of a statutory "process" is where the process steps provide a transformation or reduction of an article to a different state or thing* (*Diehr*, 450 U.S. at 183, 209 USPQ at 6). In *Alappat*, the Court held that "*data, transformed by a machine*" "*to produce a smooth waveform display*" "*constituted a practical application of an abstract idea.*" *State Street*, 149 F.3d at 1373. In *Arrhythmia*, the Court held "*the transformation of electrocardiograph signals*" "*by a machine*" "*constituted a practical application of an abstract idea.*" *Id.* Likewise, in *State Street*, the Court held that "*the transformation of data*" "*by a machine*" "*into a final share price, constitutes a practical application of a mathematical algorithm.*" *Id.* Thus, while *Diehr* involved the transformation of a tangible object - curing synthetic rubber - the Court also regards the transformation of intangible subject matter to similarly be eligible, so long as data represent some real world activity. The preceding discussion and the *Ballow* reference make it clear that the rejected claims describe useful inventions for analyzing and improving the real world performance of a business enterprise. The Appellant respectfully submits that the preceding discussion also makes it clear that the claimed inventions pass the data transformation test and that each of the claims describe a process that supports a practical application with substantial, specific utility and are therefore statutory subject matter.

Reason #4 - The fourth reason claim 36 and claim 55 are patentable is that the stated basis for the claim rejections runs counter to the U.S.P.T.O. position expressed in regards to *In re Comiskey*, No. 2006- 1286, an apparent violation of 35 USC 3.

**Issue 6 - Whether the invention described in claims 64 and 70 represent patentable subject matter under 35 USC 101?**

The claims are patentable for several reasons. The primary reason is that the arguments related to the patentability of the claimed invention, an alleged abstract focus that is not concrete, tangible and/or useful, fails to establish a *prima facie* case of non statutory subject matter and a lack of utility for a number of reasons as detailed below.

Reason #1 - The first reason claims 64 and 70 are patentable is the first reason advanced under issue #5.

Reason #2 - The second reason claims 64 and 70 are patentable is that the claim rejections are not in compliance with the requirements of the Administrative Procedures Act and are therefore moot. The Appellant respectfully submits that as discussed under Reason #1, the Office Action used to support the claim rejections fails to provide even a scintilla of evidence to support the allegations of non statutory subject matter that it contains and that as a result it fails to meet the substantial evidence standard. The Appellant respectfully submits that the rejection of claims 64

and 70 also fails to pass the arbitrary and capricious test because there is no rational connection between the U.S.P.T.O. fact-findings in Battas and Mahmood (U.S. Patent 6,757,689 and 7,177,822) and the finding that claims 64 and 70 represent non-statutory subject matter. In Battas and Mahmood the U.S.P.T.O. found that integrating and processing data was tangible, concrete and useful. Given these previous fact-findings, it is irrational and unreasonable to state that the claim 70 method of integrating data and the claim 64 method of integrating and processing data are not tangible concrete and/or useful.

Reason #3 - The third reason that claims 64 and claim 70 are patentable is that the claimed inventions are processes that transform transaction data into a different thing. The process of claim 64 transforms transaction data from a plurality of systems into an integrated set of data and then processes the integrated data to produce useful results while the process of claim 70 transforms data from a plurality of management systems into an integrated set of data. As noted in the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility "*the Supreme Court noted that one example of a statutory "process" is where the process steps provide a transformation or reduction of an article to a different state or thing* (*Diehr, 450 U.S. at 183, 209 USPQ at 6*). The preceding discussion makes it clear that the rejected claims describe useful inventions that among other things enable the analysis and improvement of the real world performance of a business enterprise. The Appellant respectfully submits that the preceding discussion also makes it clear that the claimed inventions pass the data transformation test and that each of the claims describe a process that supports a practical application with substantial, specific utility and are therefore statutory subject matter.

Reason #4 - The fourth reason claim 64 and claim 70 are patentable is that the stated basis for the claim rejections runs counter to the U.S.P.T.O. position expressed in regards to *In re Comiskey, No. 2006- 1286*, an apparent violation of 35 USC 3.

#### **Issue 7 – Whether claim 36, claim 55, claim 64 and/or claim 70 are indefinite under 35 USC 112 second paragraph?**

The claims are patentable for several reasons. The primary reason is that the arguments related to the alleged indefiniteness of the claims, the alleged indefiniteness of the term “enterprise related data”, fails to establish a *prima facie* case of indefiniteness for a number of reasons as detailed below.

Reason #1 - The first reason that claim 36, claim 55, claim 64 and claim 70 are patentable is that the Examiner has failed to establish a *prima facie* case that the claims are indefinite under §112 second paragraph. MPEP 2173.02 states that: *definiteness of claim language must be analyzed, not in a vacuum, but in light of: (A) The content of the particular application disclosure; (B) The teachings of the prior art; and (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. In reviewing a claim for compliance with 35 U.S.C. 112, second paragraph, the*

*examiner must consider the claim as a whole to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. 112, second paragraph, by providing clear warning to others as to what constitutes infringement of the patent. See, e.g., Solomon v. Kimberly-Clark Corp., 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000). See also In re Larsen, No. 01-1092 (Fed. Cir. May 9, 2001).* The arguments presented by the Examiner fail to establish the prima facie case required to sustain a §112 second paragraph rejection in several ways, including:

1. Each of the rejections are based on alleged confusion regarding a single term “enterprise related data” rather than the claim as a whole as is required;
2. Each of the rejections fail to consider the fact that the application disclosure fully describes the enterprise related data that are used in each invention (the data on the aspects of financial performance being modeled i.e. revenue, real options, etc. and the data selected by the induction algorithms after initial selection by a stepwise regression algorithm); and
3. The Office Action containing the rejections contained no evidence that a person of ordinary skill in the pertinent arts would have any confusion about the scope of any of the rejected claims.

Reason #2 - The second reason that claim 36, claim 55, claim 64 and claim 70 are patentable is that the assertions regarding the alleged indefiniteness of the claims are not in compliance with the requirements of the Administrative Procedures Act and are therefore moot. In Dickinson v. Zurko, 119 S. Ct. 1816, 50 USPQ2d 1930 (1999), the Supreme Court held that the appropriate standard of review of PTO findings are the standards set forth in the Administrative Procedure Act ("APA") at 5 U.S.C. 706 (1994). The APA provides two standards for review – an arbitrary and capricious standard and a substantial evidence standard. The Appellant respectfully submits that the arguments presented by the Examiner fail to meet both standards. As detailed under Reason #1, the arguments presented by the Examiner fail under the substantial evidence standard. The Appellant also respectfully submits that the claim rejections also fail under the second standard of the APA – the arbitrary and capricious standard. Under that standard, the reviewing court analyzes whether a rational connection exists between the agency's fact-findings and its ultimate action. One of the reasons the claim indefiniteness rejections presented by the Examiner would fail under the arbitrary and capricious standard is that the disclosure for the instant application provides far more detail regarding the data that are being integrated than is contained in either Battas or Mahmood (U.S. Patent 6,757,689 and 7,177,822). Given these previous fact-findings, it is irrational and unreasonable to state that the claim 36, claim 55, claim 64 and/or claim 70 are indefinite.

Reason #3 - The third reason claim 36, claim 55, claim 64 and claim 70 are patentable is that the specification and drawings clearly enable any person skilled in the relevant arts to

understand the metes and bounds of the rejected claims. The Appellant believes that the description of the support for claim 36, claim 55, claim 64 and claim 70 contained in the "Summary of Claimed Subject Matter" section of this appeal brief makes it clear that the specification and drawings clearly and completely describe the metes and bounds of each rejected claim.

**Issue 8 – Whether claim 46 is indefinite under 35 USC 112 second paragraph?**

The claims are patentable for several reasons. The primary reason is that the arguments related to the alleged indefiniteness of the claims, the alleged indefiniteness of the terms "enterprise related data" and "net relative contribution", fails to establish a *prima facie* case of indefiniteness for a number of reasons as detailed below.

Reason #1 - 3 – The first three reasons claim 46 is patentable are Reason #1, Reason # 2 and Reason #3 advanced under issue #7.

Reason #4 - The fourth reason the claim is patentable is that the application disclosure clearly explains the development and use of models for identifying the net relative contribution of each element of value.

Reason #5 – The fifth reason that the claim is patentable is that the plain meaning of the words and the prior art makes the meaning of the allegedly confusing terms clear to those of average skill in the art.

**8. Conclusion**

For the extensive reasons advanced above, Appellant respectfully but forcefully contends that each claim is patentable. Therefore, reversal of all rejections is courteously solicited.

Respectfully submitted,

/B.J. Bennett/

B.J. Bennett, President Asset Trust, Inc.

Dated: July 27, 2008

## **9. Claims Appendix**

36. A computer implemented enterprise method, comprising:
- preparing transaction data related to a commercial enterprise for use in processing,
- analyzing said data to identify a portion of data relevant to a market value, and
- developing a model of an enterprise market value by an element and category of value by completing a series of multivariate analyses that utilizes said identified data
- where the categories of value are selected from the group consisting of current operation, real option, market sentiment and combinations thereof,
- where the model of enterprise market value identifies a tangible contribution of each element of value to each category of value and calculates a share price for enterprise equity, and
- where the elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, intellectual property, partnerships, processes, vendors and vendor relationships and combinations thereof.
37. The method of claim 36 that further comprises completing activities selected from the group consisting of: determining an element contribution, quantifying an element impact, valuing an element, completing an analysis of enterprise financial performance, optimizing one or more aspects of enterprise financial performance, simulating an enterprise financial performance, optimizing a future enterprise market value, quantifying a future enterprise market value, creating a management report, valuing an enterprise market sentiment, calculating a real option discount rate, valuing a real option, valuing a share of enterprise stock, determining a target share price and combinations thereof.
38. The method of claim 37 where a financial performance optimization further comprises identifying one or more value driver changes that will optimize of one or more aspects of financial performance where said aspects of financial performance are selected from the group consisting of revenue, expense, capital change, cash flow, real option value, future market value, market sentiment value, market value and combinations thereof.
39. The method of claim 36 wherein a series of multivariate analyses are selected from the group consisting of identifying one or more previously unknown item performance indicators, discovering one or more previously unknown value drivers, identifying one or more previously unknown relationships between one or more value drivers, identifying one or more previously unknown relationships between one or more elements of value, quantifying one or more inter-relationships between value drivers, quantifying one or more impacts between elements of value, developing one or more composite variables, developing one or more vectors, developing one or more causal element impact summaries, identifying a best fit combination of a predictive model algorithm and one or more element of value impact summaries for modeling enterprise market value and each of the components of value, determining a net element impact for each category of value, determining a relative strength of the elements of value between two or more enterprises, developing one or more real option discount rates, calculating one or more real

option values, calculating an enterprise market sentiment value by element and combinations thereof.

40. The method of claim 39 wherein a predictive model algorithm is selected by a tournament from the group consisting of classification and regression tree; generalized autoregressive conditional heteroskedasticity, regression; generalized additive; redundant regression network; rough-set analysis; Bayesian; multivariate adaptive regression spline and support vector method.

41. The method of claim 36 wherein enterprise transaction data are obtained from systems selected from the group consisting of advanced financial systems, basic financial systems, alliance management systems, brand management systems, customer relationship management systems, channel management systems, estimating systems, intellectual property management systems, process management systems, supply chain management systems, vendor management systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, web site systems, the Internet, external databases and combinations thereof.

42. The method of claim 36 wherein the method further comprises using one or more composite applications to complete the processing.

43. The method of claim 36 wherein a model of enterprise market value further comprises a combination of component and category of value models selected from the group consisting of up to three predictive component of value models, a real option discount rate model, a real option valuation model, a market sentiment model by element of value and combinations thereof.

44. The method of claim 36 where preparing transaction data for use in processing further comprises integrating said data in accordance with a common schema where the common schema is defined by a CORBA metadata or an xml metadata.

45. The method of claim 36 that further comprises identifying one or more value driver changes that will optimize a future market value portion of said enterprise market value.

46. A program storage device readable by a computer, tangibly embodying a program of instructions executable by a computer to perform an element method, comprising:

integrating enterprise transaction data in accordance with a common model or schema, analyzing said data using a predictive model to identify one or more indicators of value for each element of value by a category of value where the categories of value are current operation and categories of value selected from the group consisting of real option, market sentiment and combinations thereof,

determining a net tangible, relative contribution for each element of value to each category of value by analyzing an enterprise financial performance model comprised of said indicators by category and element of value,

calculating a value for each element of value using said net relative contributions, and reporting the value of the elements of value using an electronic display or a paper document.

47. The program storage device of claim 46 where elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, intellectual property, partnerships, processes, production equipment, vendors and vendor relationships, and combinations thereof.

48. The program storage device of claim 46 where a net relative contribution for each of one or more elements of value to each of one or more categories of value further comprises a direct element contribution to a category of value net of any element impacts on other elements of value.

49. The program storage device of claim 46 where determining net relative contributions for each of one or more elements of value to a real option category further comprises:

computing the difference between the real option value calculated using the company cost of capital and the value calculated using a real option discount rate determined on the basis of relative element strength; and

assigning the value difference to the different elements of value based on their relative contribution to the difference in the two discount rates.

50. The program storage device of claim 46 where the net element contributions are identified by learning from the data where learning from the data is supported by genetic algorithms.

51. The program storage device of claim 46 where a common model or schema is defined by an xml metadata.

52. The program storage device of claim 46 where modeling enterprise financial performance further comprises:

identifying one or more value drivers for each element of value from the previously identified indicators,

developing one or more element impact summaries from said value drivers for market value and each component of value,

identifying a best fit combination of element impact summaries and predictive model algorithm for modeling market value and each component of value,

determining a relative strength for each of the elements of value causal to market value change vis a vis competitors,

calculating a real option discount rate using the relative element strength information for the elements that support the real option,

calculating a real option value and identifying a contribution to real option value by element of value using said real option discount rate, and  
identifying a net element contribution to enterprise market value by category of value by combining the results from the prior processing.

53. The program storage device of claim 46 where the calculated value for each element of value further comprises a value for a point in time within a sequential series of points in time.

54. The program storage device of claim 46 wherein the net relative contribution for each element of value to each category of value further comprises a net causal contribution.

55. A computer implemented future market value method, comprising:  
integrating enterprise related data in accordance with a common model or schema,  
analyzing said data to identify a portion of data relevant to a market value,  
developing a causal model of net element of value contribution to enterprise market value by category of value using the identified portion of data, and  
identifying one or more element of value related changes that will optimize a future market value portion of enterprise market value by analyzing said model  
where the elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, intellectual property, partnerships, processes, vendors and vendor relationships and combinations thereof.

56. The method of claim 55 where a common model or schema is defined by metadata.

57. The method of claim 55 that is enabled by the use of a flexible system architecture where said architecture further comprises event data that has been integrated in accordance with a common xml schema and independent components of application software that can be combined to process said data as required to produce useful results.

58. The method of claim 55 where a net contribution for each of one or more elements of value to each of one or more categories of value further comprises a direct element contribution to a category of value net of any element impacts on other elements of value within said category of value.

59. The method of claim 55 where a causal model of net element contribution further comprises a plurality of models selected from the group consisting of predictive component of value models, predictive market value models, relative element strength models, real option discount rate models, real option valuation models, market sentiment models and combinations thereof.

60. The method of claim 55 where a net contribution for each of one or more elements of value further comprises a direct contribution to a value of a category of value net of any impact on other elements of value.

61. The method of claim 55 where the one or more categories of value are selected from the group consisting of current operation, real option, market sentiment and combinations thereof.
62. The method of claim 55 where the future market value portion of enterprise market value further comprises a summation of values selected from the group consisting of the real option value, the portion of current operation value caused by elements of value, the portion of market sentiment value caused by elements of value and combinations thereof.
63. The method of claim 55 where the value driver changes that will optimize future market value are identified by algorithms selected from the group consisting of monte carlo algorithms, genetic algorithms, multi criteria optimization algorithms and combinations thereof.
64. A composite application method for data processing, comprising:  
using two or more independent components of application software to produce one or more useful results by processing data where said data has been aggregated from two or more systems in accordance with a common model or schema defined by an xml metadata standard.
65. The method of claim 64 where the independent components of application software can be flexibly combined as required to support the development of one or more useful results.
67. The method of claim 64 where the independent components of application software complete processing selected from the group consisting of: analysis, attribute derivation, capitalization, causal analysis, classification, clustering, count linkages, data acquisition, data conversion, data storage, data transformation, element life estimation, indicator selection, induction, keyword counting, keyword match identification, locate linkages, relative strength determination, statistical learning, valuation, vector generation and combinations thereof.
68. The method of claim 64 that produces useful results selected from the group consisting of: element contribution determination, element impact quantification, element valuation, enterprise financial performance analysis, enterprise financial performance optimization, enterprise financial performance simulation, future market value optimization, future market value quantification, management reporting, real option discount rate calculation, real option valuation, share price valuation, sub-element clustering, target share price determination and combinations thereof.
69. The method of claim 64 where enterprise management systems are selected from the group consisting of accounts receivable systems, accounts payable systems, advanced financial systems, basic financial systems, alliance management systems, brand management systems, customer relationship management systems, channel management systems, estimating systems, intellectual property management systems, process management systems, supply chain management systems, vendor management systems, operation management systems, sales management systems, human resource systems, capital asset systems, inventory

systems, invoicing systems, payroll systems, purchasing systems, web site management systems, the Internet, external databases and combinations thereof.

70. A computer implemented data processing method, comprising:  
integrating, converting and storing enterprise related transaction data in accordance with a common xml schema to support organization processing  
where a set of integration and conversion rules are established using a metadata and conversion rules window and saved in metadata mapping table,  
where some data are pre-specified for integration and conversion,  
where the common schema further comprises a network schema that is defined by an xml metadata,  
where said integration is completed by one or more independent software components, and where the integrated data is stored in one or more tables in an application database.
71. The data processing method of claim 71 where each of one or more tables in an application database further comprise one axis that is defined by one or more time periods that require data and another axis that is defined by one or more data categories selected from the group consisting of components of value, sub components of value, known value drivers, elements of value, non-relevant attributes and combinations thereof.
72. A computer implemented market value accounting method, comprising:  
preparing a plurality of enterprise related data for use in processing,  
analyzing said data to identify the portion of data relevant to market value,  
analyzing the identified data with a series of models as required to identify a tangible contribution of each of one or more elements of value to each of one or more categories of value where the categories of value further comprise a current operation category of value and a category of value selected from the group consisting of real option, market sentiment and combinations thereof,  
using the tangible contribution for each element of value to identify a market value for each element of value, and  
reporting the value of each element of value in a balance sheet format  
where the elements of value are customers and elements of value selected from the group consisting of alliances, brands, channels, employees, intellectual property, partnerships, processes, vendors and vendor relationships and combinations thereof, and  
where the reported value is a value for a specific point in time within a sequential series of points in time.
73. The method of claim 72, further comprising including a value for a plurality of financial assets in a report with a balance sheet format.
74. The method of claim 72 that further comprises:  
tracking a change in a value of each of one or more elements of value over time, and including the calculated changes in value of each element of value in an income statement or a cash flow statement.

## **10. Evidence Appendix**

Page 37                    excerpt from Visual Automation reference first received October 7, 2006

Pages 38 – 40            Rule 132 declaration received November 5, 2007



## DDE Basics

Dynamic Data Exchange (DDE) is a mechanism for two applications on the same computer to pass data back and forth. There are three basic components to a DDE conversation, the application, topic, and item(s). Some sources may call the topic and item(s) by different names, but it's the same thing. First, let's define each of these parts.

### Application

That's typically the executable name (but not necessarily). For instance, when working with Excel, the application name is EXCEL and the executable name is EXCEL.EXE. When connecting to the Visual Automation Program Manager as a DDE Server, the application is VAPRGMAN and the executable name is VAPRGMAN.EXE.

### Topic

There may be multiple topics in an application. Topics are a method of organizing the items that correlate with the functionality of a program. In Excel 4.0, a topic corresponds with an open sheet. If you have 4 spreadsheets open, you have a topic for each one and designated by the name of each open sheet. In Excel 5.0, several workbooks may be open with several sheets inside, each sheet is a topic designated by both the workbook and the sheet name. In the Visual Automation Program Manager, there is only one topic, named System.

### Item

The item is actually the piece of data, or the first piece of data within a block of data. In Excel, the item is the cell that contains the data, denoted by row & column position such as R1C1. In the Visual Automation Program Manager, the items are as follows:

Drive	Memory
DriveAlarm	MemoryAlarm
DriveAlarmOn	MemoryAlarmOn

These represent the memory free, and disk space free with corresponding alarm threshold settings. The AlarmOn items are 0 if not in alarm and 1 if in alarm.

### Clients and Servers

Just when you thought you were getting the hang of this, I had to throw the old client/server thing at you. Yeah, I know these are the two most used (and mis-used) terms thrown at us these days, but let's get through it. An application can be a DDE Server. It can be a DDE Client. It can be both a DDE Server and a DDE Client! A DDE Server serves data to DDE clients. A DDE Client requests data from a DDE Server. Excel is an example of both a client and a server. Excel can get data from DDE Servers and serve data to other DDE clients. The Visual Automation Program Manager is also a client and a server. It serves data as described above and can launch applications based on other DDE Servers as described in the startup application section.

### An Example

Take a DDE Server, select some data, and select Copy or Copy to Clipboard from the edit menu. This places the "hot" data into the clipboard. Take a DDE Client, select Paste Link or Paste Special (and then Link), and a DDE Link should be created. By examining the syntax in your DDE Client, you should be able to create DDE Links without the clipboard. DDE Syntax is different in just about every single software package, so you should read through your help files about your particular application. Does the name Dynamic Data Exchange make more sense now? Dynamic data in the server is being moved to a client, via the Application, Topic, and Item.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appl. No. : 10/743,616

Applicant : Jeff S. Eder

Filed : 22 December 2003

Art Unit :: 3692

Examiner : Jennifer Liversedge

Docket No. : AR - 61

Customer No. : 53787

**DECLARATION UNDER RULE 132**

I, Dr. Peter Brous, do hereby declare and say:

My home address is 17221 NE 8<sup>th</sup> Street, Bellevue, WA 98008. I have a B.S. degree in Finance from the University of Connecticut and a PhD in Finance from the University of Oregon.

I have worked in the finance field for 25 years, concentrating in the areas of corporate performance measures, business valuation, capital budgeting, and real option analysis. I have been a professor of finance at Albers School of Business and Economics at Seattle University for 15 years and was recently honored to hold the Dr. Khalil Dibee Endowed Chair.

I further declare that I do not have any direct affiliation with the application owner, Asset Reliance, Inc or its licensee Knacta, Inc. I met the inventor, the President of Knacta, Inc.,

for the first time on October 16, 2007. I understand that Knackta, Inc. has a license to the intellectual property associated with this application. I have had extremely brief discussion of this patent application and the article cited below with the inventor.

On October 25, 2007 I was given a copy of "How to sort out the premium drivers of post deal value", by Daniel Bielinski published in Mergers and Acquisitions in July of 1993. Until that time I had not read the article. However, I have read many articles on the subject of Value Based Management. I have a strong understanding of the concept and practice of Value Based Management and have been teaching this concept for over 10 years. I have studied the entire article and I am totally familiar with the language of the article with the scope thereof.

Based on my experience and education in the field of finance, I have concluded that the the Bielinski article and Value Based Management does not inherently describe or enable: the development of a computational model of enterprise market value by element of value and segment of value where the elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, employee relationships, intellectual capital, intellectual property, partnerships, processes, production equipment, vendors and vendor relationships and the segments of value are selected from the group consisting of market sentiment, real option, derivative, excess financial asset.

There are several reasons for this:

1. As stated in the article VBM is similar to SVA. One of the ways it is similar is that it focuses on "value drivers" such as profit margin and growth instead of intangible assets as part of a tree based analysis of cash flow. Unlike SVA, VBM includes operational value drivers that drive the value drivers. However, these are generally not intangible elements of value. For example, Bielinski provides an example of breaking down profit margin by looking more closely at the cost of materials;
2. VBM is also similar to SVA in that it relies on the efficient market theory and this precludes the analysis of market sentiment;

3. SVA and VBM are tools that focus on the standard valuation model, a discounted cash flow model, that does not even consider the value associated with flexibility or decision making that is done sequentially and conditionally based on the arrival of new information. The valuation of this flexibility is the basis for valuation using real option analysis; and
4. Neither VBM or SVA address the valuation of derivatives.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issuing thereon.

Signed,



Dr. Peter Brous

Date: 10/31/2007

**11. Related Proceedings Appendix - None**